

ACKNOWLEDGMENT

First and foremost, I would like to express my deep gratitude towards my guide **Dr.**C. Ratna Prabha. Her constant support and advice have an immense value for successful completion of this work. I truly enjoyed her teaching and enjoyed working under her.

I sincerely thank Head of the Department Prof. G. Naresh Kumar for providing me the research facilities and infrastructure in the Department.

I acknowledge University Grants Commission for providing the research fellowship.

Thanks to Dr. Rohan Baker (The John Curtin School of Medical Research, Australian National University, Australia), Prof. Mark Searle (School of Chemistry, Nottingham, United Kingdom), Dr. Daniel Finley (Department of Cell Biology, Harvard Medical School, Boston, Massachusetts) and Prof. Alexander Varshavsky for providing the plasmids and strains for the research project.

Special thanks to Dr. Ch. Mohan Rao and his entire lab (CCMB Hyderabad) for their help in circular dichroism and fluorescence spectroscopy experiments.

I thank all the teachers of the department Prof. Tara Mehta, Prof. S. S. Katyare, Prof. S. D. Telang, Dr. M. D. Jani, Prof. Rasheedunnisa Begum, Prof. Sarita Gupta, Dr. S. R. Acharya, Dr. Pushpa Robin, Dr. Laxmi Priya and Dr. D. Suthar for their help at various stages.

My Ph. D. would not have attained this shape without the help of my lab mates, especially Hemendra, whose association with me is not just as a lab mate but also a class mate and a good friend. Special thanks to him for helping me with my experiments when they stretched to late nights. I thank him for his help with experiments, discussions and critical analysis of the results which always kept me inventive. I also admire his calm nature which made me adjust with him very easily. I am also thankful to my lab juniors for their constant support that made me feel at home in the lab.

My seniors have a special role in my Ph. D. special thanks to Vikas, Keyur, Shajil, Namita, Gopit, Prashant, Sanjay, Divya, Mukta madam, Minal, Sameer, Munjal, Sonal madam and praveena madam, Hiren, Aditi and Jisha for helping me whenever and with what ever they could. I would also like to thank Dr. Vihas for his constant help with everything either with experiment or with literature accessibility.

Thanks to all research students of the Department Chirayu, Prakash, Niraj, Purva, Krishma, Maulik, Heena, Jyotika, Iqbal, Naresh, Mitesh, Saiyed, Swapnali, Maneesh, Mrinal, Hiral and Prashant for making work enjoyable.

Thanks to my friends Navjot, Richa, Rekha, Swati, Meenakshi and Mugdha who contributed something or the other and also their motivation to cheer me up at times. Thank to Deepa for always helping me with references. Thank to Pavan and Ashish for helping me for my stay in Hyderabad. Thanks to Jagat for helping me with my thesis work and always being present whenever needed.

I would also like to acknowledge M.Sc. students, Azam, Harsh, Darshan, Mitali, Urja and Seema who worked with me during the project. Teaching them and learning from them was a nice experience. I would also like to thank Shankar, Anup, Janaki, Shiona Sachin, Anita, Swapnil, Ajit, Mayur, Devdatt, Padma, Meenakshi, Renuka, Sarita, and Pankti for their help.

Thanks to all the office staff of the department.

Without care and support of my mother this work would have been impossible. I am greatly thankful to her for the constant unconditional attention to me. It would be incomplete if I forget to address my younger brother and his support for the duration of my work. Thanks to his jokes which kept me smiling with everyday.

Pradeep Mishra
July 2009